

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference C07128	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/AU2007/001051	International filing date (<i>day/month/year</i>) 27 July 2007	(Earliest) Priority Date (<i>day/month/year</i>) 28 July 2006
Applicant RESMED LTD et al		
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of 8 sheets. <input type="checkbox"/> It is also accompanied by a copy of each prior art document cited in this report.		
1. Basis of the report a. With regard to the language, the international search was carried out on the basis of: <input checked="" type="checkbox"/> The international application in the language in which it was filed. <input type="checkbox"/> A translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)). b. <input type="checkbox"/> This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)). c. <input type="checkbox"/> With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I. 2. <input type="checkbox"/> Certain claims were found unsearchable (See Box No. II). 3. <input checked="" type="checkbox"/> Unity of invention is lacking (See Box No. III). 4. With regard to the title, <input checked="" type="checkbox"/> the text is approved as submitted by the applicant. <input type="checkbox"/> the text has been established by this Authority to read as follows: 5. With regard to the abstract, <input checked="" type="checkbox"/> the text is approved as submitted by the applicant. <input type="checkbox"/> the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority. 6. With regard to the drawings, a. the figure of the drawings to be published with the abstract is Figure No. 1 <input checked="" type="checkbox"/> as suggested by the applicant. <input type="checkbox"/> as selected by this Authority, because the applicant failed to suggest a figure. <input type="checkbox"/> as selected by this Authority, because this figure better characterizes the invention. b. <input type="checkbox"/> none of the figures is to be published with the abstract.		

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.: **1-5, 11-32, 68-117, 119 and 160,**
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: III

There are 13 independent claims and 161 claims in total. It is impossible to exactly determine how many inventions are claimed.

1. Claims 1-5, 11-32 and 160 are directed to an air delivery system. Special technical feature is a partially collapsible tube.
2. Claim 6 is directed to a gas delivery system. Special technical feature is the at least two gas passages.
3. Claim 10 is directed to an air delivery system and stabilizing system. Special technical feature is a rigid element to prevent collapse.
4. Claims 33-37 are directed to an air delivery system. Special technical feature is a manifold near the crown of the patient.
5. Claims 38-67 are directed to an air delivery system and stabilizing system. Special technical features are a manifold, a pair of tubes and a rigid element. (Combination of features of claims 10 and 33).
6. Claims 68-117 are directed to an interfacing structure. Special technical feature is viscoelastic foam interface.
7. Claim 118 is an omnibus claim relating to claims 1-67.
8. Claim 119 is an omnibus claim relating to claims 68-117.
9. Claims 120-122 are directed to a patient interface. Special technical feature is loops at vector $40^{\circ} - 80^{\circ}$.
10. Claims 123-133 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is thickness of about 5 – 50 mm.
11. Claims 134-139 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is the unskinned surface.
12. Claims 140-148 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is sufficient softness and compliance in a direction normal to patient's face..
13. Claims 149-152 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is breathable or permeable material.
14. Claims 153-154 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is interface adapted to provide a compressive force.
15. Claims 155-156 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is a textured surface.
16. Claims 157-159 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is the rate of return.

Since these groups of claims do not share any of the special technical features identified, a technical relationship between the inventions does not exist. Accordingly the claims do not relate to one invention or to a single inventive concept, a priori.

It is considered that because of these distinct features, these inventions could not be searched without involving significant extra effort. Therefore, extra fees are warranted.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2007/001051

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

A61M 16/00 (2006.01) *A61M 16/08* (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: IPC A61M 16/- & keywords: (OSA, +PAP, NIPPV, apnea, respirat+, ventilat+, interface, mask, collapse, flatten, flex+, tube, duct, hose, lumen, lie, rest, lying, weight, viscoelastic, soft, analastic, pliable, foam, polyether, polyurethane) and similar terms.**Espace:** (OSA, +PAP, NIPPV, apnea, ventilat+) and (interface, mask) and (collapse, flatten, flex+) and (tube, duct, hose, lumen) and (viscoelastic, analastic,) and (soft, pliable) and (foam, poly+) and similar terms.**USPTO:** (OSA, +PAP, NIPPV, apnea, ventilat+) and (interface, mask) and (collapse, flatten, flex+) and (tube, duct, hose, lumen) and (viscoelastic, analastic,) and (soft, pliable) and (foam, poly+) and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5538000 (RUDOLPH) 23 July 1996 Whole document	1-5, 11-32, 160
X	WO 2005/099801 A1 (RESMED LIMITED) 27 October 2005 Whole document	1-5, 11-32, 160



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

5 November 2007

Date of mailing of the international search report

12 OCT 2007

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustalia.gov.au
Facsimile No. (02) 6285 3929

Authorized officer

KAREN VIOLANTE
AUSTRALIAN PATENT OFFICE
(ISO 9001 Quality Certified Service)
Telephone No : (02) 6283 7933

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2007/001051

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0025885 A1 (PAYNE, JR) 12 February 2004 Figure 1	1-5, 11-32, 160
A	WO 1982/003548 A1 (SOMED PTY LTD) 28 October 1982 Whole document	1-5, 11-32, 160
A	US 2005/0039757 A1 (WOOD) 24 February 2005 Whole document	1-5, 11-32, 160
A	US 2005/0284481 A1 (MEYER ET AL) 29 December 2005 Whole document	1-5, 11-32, 160
X	US 6196223 B1 (BELFER ET AL) 6 March 2001 Whole document	68-117, 119
X	US 2003/0168063 A1 (GAMBONE ET AL) 11 September 2003 Whole document	68-117, 119
X	WO 2005/053781 A1 (FISHER & PAYKEL HEALTHCARE LIMITED) 16 June 2005 Whole document	68-117, 119
X	DE 3011900 A1 (WARNE SURGICAL PRODUCTS LTD) 23 October 1980 Whole document	68-117, 119
X	EP 0427474 A2 (SMITHS INDUSTRIES MEDICAL SYSTEMS INC) 15 May 1991 Whole document	68-117, 119
X	WO 2000/020072 A1 (RESPIRONICS, INC) 13 April 2000 Whole document	68-117, 119
X	US 6895965 B2 (SCARBERRY ET AL) 24 May 2005 Whole document	68-117, 119
X	US 6412487 B1 (GUNARATNAM ET AL) 2 July 2002 Whole document	68-117, 119

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2007/001051

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	5538000	NONE			
WO	2005099801	AU	2005232337	CN	1942215
				EP	1740247
US	2004025885	US	6938620	US	2005061326
WO	1982/003548	AU	83901/82	EP	0088761
				US	4944310
US	2005039757	AU	13555/02	CA	2364183
		CA	2416410	CA	2368825
				EP	1317940
		US	6478026	EP	1317941
		US	6807967	US	6776162
		US	6997177	US	6595215
		US	7191781	US	6863069
		US	2002092527	US	7059328
		US	2005028823	US	7234465
		US	2005133039	US	2003116163
		US	2006150982	US	2003116163
		WO	2005016407	US	2005034730
				US	2005126574
				US	2005235999
				US	2005236000
				WO	2005016402
US	2005284481	FR	2872051		
US	6196223	US	5918598		
US	2003168063	AU	2003297999	WO	2004052439
WO	2005053781	AU	2004294873	EP	1720593
DE	3011900	GB	2045092	JP	55166166
		US	4347205	MY	36884
EP	0427474	CA	2019533	EP	0427473
		GB	2237811	GB	2237746
WO	2000020072	AU	62719/99	CA	2201961
		EP	0799076	CA	2345252
		US	5884624	US	5647357
		US	2002100479	US	6895965
				WO	1997009090
US	6895965	AU	62719/99	CA	2201961
		EP	0799076	CA	2345252
		US	5884624	US	5647357
		US	2006076018	US	2002100479
		WO	1997009090	WO	2000020072

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU2007/001051

US	6412487	AU	12454/97	AU	14892/00	AU	16355/00
		AU	16811/02	AU	26505/00	AU	34293/97
		AU	42476/99	AU	49012/00	AU	52005/00
		AU	52007/00	AU	52691/00	AU	61522/01
		AU	2004205283	CA	2261790	CA	2298129
		CA	2470671	CA	2519452	EP	0956069
		EP	1027905	EP	1187647	EP	1187648
		EP	1187649	EP	1187650	EP	1479406
		EP	1525895	EP	1621225	EP	1625868
		EP	1637175	EP	1640034	EP	1741461
		HK	1071083	JP	2000279520	JP	2004041779
		JP	2005111287	JP	2006061703	NZ	513052
		NZ	526165	NZ	526166	NZ	526167
		NZ	526168	NZ	542849	NZ	543939
		US	6112746	US	6357441	US	6374826
		US	6428231	US	6439230	US	6491034
		US	6513526	US	6532961	US	6561710
		US	6581602	US	6585441	US	6634358
		US	6691707	US	6701927	US	6796308
		US	6860269	US	6871649	US	7021311
		US	7044668	US	7066178	US	7069933
		US	7089939	US	7174893	US	7178527
		US	7185652	US	7207334	US	7234466
		US	7243651	US	2002005198	US	2002005200
		US	2002023649	US	2002023650	US	2002029781
		US	2002074001	US	2002083948	US	2002096176
		US	2002104540	US	2002108613	US	2002153012
		US	2002157672	US	2002174867	US	2002174868
		US	2003034034	US	2004025881	US	2004086319
		US	2004094159	US	2004099272	US	2004134497
		US	2005022818	US	2006076017	US	2006107960
		US	2006130843	US	2006144405	US	2006188316
		US	2006201515	US	2006289010	US	2007107735
		WO	0078381	WO	0078382	WO	0078383
		WO	0078384	WO	0134406	WO	0184979
		WO	9804310				

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU2007/001051

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX

From the:
INTERNATIONAL SEARCHING AUTHORITY

CORRECTED VERSION

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: Halford & Co. Level 7 1 Market Street SYDNEY NSW 2000		Date of mailing (day/month/year) 12 OCT 2007
Applicant's or agent's file reference C07128		FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/AU2007/001051	International filing date (day/month/year) 27 July 2007	Priority date (day/month/year) 28 July 2006
International Patent Classification (IPC) or both national classification and IPC Int. Cl. A61M 16/00 (2006.01) A61M 16/08 (2006.01)		
Applicant RESMED LTD et al		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	Date of completion of this opinion 5 November 2007	Authorized Officer KAREN VIOLANTE AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. (02) 6283 7933
--	---	---

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ The international application in the language in which it was filed
 - ☐ A translation of the international application into, _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3(a) and 23.1(b)).
2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2007/001051

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application
- ☒ claims Nos: 6-10, 33-67, 118, 120-159, 161

because:

- ☐ the said international application, or the said claim Nos.
relate to the following subject matter which does not require an international search (*specify*):

- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos.
are so unclear that no meaningful opinion could be formed (*specify*):

- ☐ the claims, or said claims Nos.
are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

- ☒ no international search report has been established for said claims Nos. 6-10, 33-67, 118, 120-159, 161

- ☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

- ☐ furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
- ☐ furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
- ☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

- ☐ a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Searching Authority in a form and manner acceptable to it.

- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

- ☐ See Supplemental Box for further details.

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:

☒ paid additional fees

☐ paid additional fees under protest and, where applicable, the protest fee

☐ paid additional fees under protest but the applicable protest fee was not paid

☐ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

There are 13 independent claims and 161 claims in total. It is impossible to exactly determine how many inventions are claimed.

1. Claims 1-5, 11-32 and 160 are directed to an air delivery system. Special technical feature is a partially collapsible tube.
2. Claim 6 is directed to a gas delivery system. Special technical feature is the at least two gas passages.
3. Claim 10 is directed to an air delivery system and stabilizing system. Special technical feature is a rigid element to prevent collapse.
4. Claims 33-37 are directed to an air delivery system. Special technical feature is a manifold near the crown of the patient.
5. Claims 38-67 are directed to an air delivery system and stabilizing system. Special technical features are a manifold, a pair of tubes and a rigid element. (Combination of features of claims 10 and 33).
6. Claims 68-117 are directed to an interfacing structure. Special technical feature is viscoelastic foam interface.
7. Claim 118 is an omnibus claim relating to claims 1-67.
8. Claim 119 is an omnibus claim relating to claims 68-117.
9. Claims 120-122 are directed to a patient interface. Special technical feature is loops at vector $40^{\circ} - 80^{\circ}$.
10. Claims 123-133 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is thickness of about 5 – 50 mm.
11. Claims 134-139 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is the unskinned surface.

(Continued in Supplemental sheet)

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☐ all parts

☒ the parts relating to claims Nos. 1-5, 11-32, 68-117, 119 and 160

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: **Box No. IV**

12. Claims 140-148 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is sufficient softness and compliance in a direction normal to patient's face..
13. Claims 149-152 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is breathable or permeable material.
14. Claims 153-154 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is interface adapted to provide a compressive force.
15. Claims 155-156 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is a textured surface.
16. Claims 157-159 are directed to an interfacing structure located at an entrance to the airways. Special technical feature is the rate of return.

Since these groups of claims do not share any of the special technical features identified, a technical relationship between the inventions does not exist. Accordingly the claims do not relate to one invention or to a single inventive concept, a priori.

It is considered that because of these distinct features, these inventions could not be searched without involving significant extra effort. Therefore, extra fees are warranted.

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	YES
	Claims 1-5, 11-32, 68-117, 119 and 160	NO
Inventive step (IS)	Claims	YES
	Claims 1-5, 11-32, 68-117, 119 and 160	NO
Industrial applicability (IA)	Claims 1-5, 11-32, 68-117, 119 and 160	YES
	Claims	NO

2. Citations and explanations:

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1 = US 5538000	D2 = WO 2005/099801	D3 = US 2004/0025885
D4 = WO 1982/003548	D5 = US 2005/0039757	D6 = US 2005/0284481
D7 = US 6196223	D8 = US 20030168063	D9 = WO 2005053781
D10 = DE 3011900	D11 = EP 0427474	D12 = WO 2000/020072
D13 = US 6895965	D14 = US 6412487	

NOVELTY:

Claims 1-5:

The claimed invention is not novel in light of documents D1-D3. Documents D1-D3 all disclose an air delivery system for providing a supply of air from a source of air at positive pressure to a patient, the air delivery system comprising: an interfacing structure located at the entrance to the airways of the patient; and at least one tube adapted to deliver the supply of air to the interfacing structure, wherein each tube has at least one open portion that is structured to allow movement between (1) an open phase in which the tube allows the flow of air without undue resistance and (2) at least a partially collapsed phase in which the tube is at least partially collapsed to restrict or prevent the flow of air, and each tube is structured such that the weight of a typical patient's head resting on the tube is sufficient to collapse the tube from the open phase to the at least partially collapsed phase.

The features defined by the dependent claims 2-4 are also disclosed by document D1.

The features defined by the dependent claim 5 is either disclosed explicitly or is known from obvious combination(s) of documents D1-D6.

(Continued on next sheet)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: **Box No. V**

Claims 11-32:

The claimed invention is not novel in light of documents D1-D3. Documents D1-D3 all disclose an air delivery system for providing a supply of air from a source of air at positive pressure to an interfacing structure located at the entrance to the airways of a patient, the air delivery system comprising: a manifold adapted to connect with the supply of positive air pressure; and at least one tube connected to the manifold and adapted to deliver the supply of air to the interfacing structure, wherein each tube is structured to allow movement between (1) an open phase in which the tube allows the passage of air and (2) a collapsed phase in which the tube is collapsed, and each tube is structured such that the weight of a typical patient's head against bedding apparel is sufficient to collapse the tube from the open phase to the at least partially collapsed phase.

The features defined by the dependent claims 12-32 are either disclosed explicitly or are known from obvious combination(s) of documents D1-D6.

Claim 68-117 and 119:

The claimed invention is not novel in light of documents D7-D14. Documents D1-D4 all disclose an interfacing structure located at an entrance to the airways of a patient comprising a support structure adapted to be coupled to an air delivery system that provides a supply of air from a source of air at positive pressure; and an interface provided to the support structure, the interface being constructed of soft viscoelastic foam and adapted to contact with surfaces of the patient's face and nose in use.

The features defined by the dependent claims 69-117 and 119 are either disclosed explicitly or are known from obvious combination(s) of documents D7-D14.

Claim 160:

The claimed invention is not novel in light of documents D1-D3. Documents D1-D3 all disclose an air delivery system for providing a supply of air from a source of air at positive pressure to a patient, the air delivery system comprising: an interfacing structure located at the entrance to the airways of the patient; and a pair of tubes adapted to extend along a respective side of the patient's face and deliver the supply of air to the interfacing structure, wherein each tube has at least one portion that is structured to allow movement between (1) an open phase in which the tube allows the flow of air without undue resistance and (2) at least a partially collapsed phase in which the tube is at least partially collapsed to restrict or prevent the flow of air, and each tube is structured such that it is comfortable to lie on.

(Continued on next sheet)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Continuation of: **Box No. V**

INVENTIVE STEP (IS):

Claims 1-5, 11-32 and 160:

Because the subject matter of all the claims is totally disclosed by the documents cited under "novelty", the subject matter is considered to be obvious in view of those documents.

Claims 69-117 and 119:

Because the subject matter of all the claims is totally disclosed by the documents cited under "novelty", the subject matter is considered to be obvious in view of those documents.

INDUSTRIAL APPLICATION:

The claims define subject matter that would be suitable for industrial application.